

Notice of Allowability	Application No.	Applicant(s)
	10/625,168	HUNTER ET AL.
	Examiner Laura C Cole	Art Unit 1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 24 July 2003.
2. The allowed claim(s) is/are 1-14.
3. The drawings filed on _____ are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 10122004.
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 07242003
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date 10122004.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Norman B. Rainer on 12 October 2004.

The application has been amended as follows:

In the Specification:

On page 9 Line 22, please delete - - 63 - - and in its place insert - - 74 - -

The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

In Figure 1 the numeral "4" should be changed to "14"

In Figure 1 the numeral "69" should be added

In Figure 1 the duplicate rightmost "62" should be removed

In Figure 2 the numeral "23" should be pointed to the lower piston

In Figure 4 the numeral "65" should be added

In Figure 8 the numeral "74" should be added

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

The following is an examiner's statement of reasons for allowance:

USPN 3,600,736 to Smith includes a front and rear assembly each having pliable circular sidewall sections, nozzle means with two orifices, and coupling means. Smith does not include intensifier means, valved flow control, and three operating pressures for the liquid.

USPN 3,902,528 to Tartabini et al. include a front and rear assembly each having pliable circular sidewall sections, coupling means, and valved flow control. Tartabini et al. does not include intensifier means, nozzle means having orifices, or three operating pressures.

USPN 4,077,080 to Ross includes a device having pliable circular sidewall sections having a valved flow control to control the sidewalls. Ross does not include front and rear assemblies, nozzle means, intensifier means, coupling means, or three operating pressures.

None of the prior art made of record includes a pig apparatus including the combination of a rear assembly having a circular cylindrical sidewall, intensifier means for increasing a first operating pressure to a second operating pressure, a front assembly having a pliable circular cylindrical sidewall that is outwardly expandable by pressure, a nozzle means adapted to rotate under the impetus of a second operating pressure and having a plurality of orifices that produce jets, a valved flow control means to divert fluid at the second operating pressure to have a third operating pressure to activate the pliable sidewall, and coupling means between the front and rear assemblies for transferring liquid.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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LCC
12 October 2004

Robert J. Warden, Sr.
ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700